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ABSTRACT

This report reviews the University of Florida's College of Veterinary Medicine and provides an analysis of the institution's strengths and weaknesses, along with recommendations to improve the college's programs. It examines the college's degree programs, students, faculty, facilities, and resources, as well as actions taken to meet recommendations issued by the Florida Board of Regents and the American Veterinary Medical Association Council on Education recommendations in 1986 and 1987, respectively. The report notes that the college's strengths include a respected administration, a strong relationship with livestock, equine, and greyhound industries in the state, and quality students and faculty. Weaknesses include fragmented facilities on and off the main campus, low faculty salaries, and high faculty turnover. Between 1988 and 1994 the college lost 41 out of 97 faculty, largely due to individuals accepting better-paying positions at other institutions. It argues that the college needs to take steps to increase faculty salaries and prevent faculty turnover. Six appendixes include Board of Regents minutes, licensure examination results, results of a survey of graduates, comparative faculty salary data, data on faculty attrition, and the consultant's vita. Contains a 42-item list of original research reports. (MDM)

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ED 387 047

VETERINARY MEDICINE PROGRAM REVIEW

STATE UNIVERSITY SYSTEM OF FLORIDA

April, 1995

BOR 94-8

NE 028 628

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Veterinary Medicine
Program Review
State University System of Florida

Consultant's Report and Recommendations

by

Dr. David P. Anderson
Dean, College of Veterinary Medicine
University of Georgia

Authorized and Coordinated by
by
Board of Regents Office
State University System of Florida
Tallahassee, Florida

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PROGRAM REVIEW OF VETERINARY MEDICINE

AT THE UNIVERSITY OF FLORIDA

ACKNOWLEDGEMENTS

The State University System's Program Review in Veterinary Medical Sciences was conducted in conjunction with the accreditation site visit of the American Veterinary Medical Association's (AVMA's) Council on Education. Sincere appreciation is expressed to the administration and faculty of the College of Veterinary Medicine at the University of Florida for their preparation of a thorough and detailed self-study and Board of Regents Addendum. The self-study was prepared in response to the "Essentials for an Accredited College of Veterinary Medicine" as prescribed by the Council on Education of the AVMA.

I especially appreciate the cooperation of the Council on Education site team in allowing me to participate in the tour of the college's facilities and in the meetings with college and university administrators, faculty, professional and graduate students.

I thank Dr. Gita Wijesinghe Pitter, Associate Director of the Board of Regents office of Program Review, for her efficient organization in the handling of all schedules, materials, and responsibility throughout this process.

I have attempted to avoid needless overlap and duplication of the evaluation report of the AVMA's Council on Education. I

have also addressed the three additional items of specific concern to the Board of Regents.

INTRODUCTION

The purpose of the College of Veterinary Medicine at the University of Florida is to advance and propagate the art and science of veterinary medicine, in its many basic biomedical and clinical facets, through the dissemination of knowledge and scholarly inquiry into the nature of diseases and the maintenance of animal health.

The primary objective of the college is to provide a quality education for students enrolled in the professional veterinary medical curriculum. The professional instruction program is designed to produce clinically oriented scientists capable of performing any of the roles the veterinarian serves in today's society, including food animal and companion animal practice, public health and consumer protection, environmental medicine, medical research, and diagnostic and laboratory animal medicine.

The instructional thrust of the college reflects the current demand and projected needs for veterinary services. During the next decade the major demand for veterinarians is anticipated to continue to be in private practice and the principal focus of the instructional program will be toward meeting that demand. The present demand for food animal veterinary practitioners greatly exceeds the supply. Animal health and disease prevention will receive greater teaching emphasis. Increased attention must be focused on preparing students for food animal practice. Added attention will focus on diseases of the less common species that are becoming increasingly popular as food or pet animals. It is

also important to provide an educational foundation in areas now viewed as a departure from traditional veterinary medical practice disciplines.

The objectives of the graduate degree programs offered by the various departments of the college are to produce scientists trained for research and/or teaching careers. Individuals who complete these programs are in the Master of Science in Veterinary Medical Sciences and PhD degree in Medical Sciences with a focus on Veterinary Medical Science. Current trends show an increased demand for veterinarians with post DVM education and training in such fields as pathology, physiology, parasitology, pharmacology, toxicology, laboratory animal medicine, avian medicine, swine medicine, dairy and beef production medicine, immunology, bacteriology, and virology. To meet these demands, the college is attempting to orient graduates towards those careers and to provide increased opportunities for this type of training.

The objectives of the clinical residency programs are to provide advanced training in clinical specialties such as radiology, medicine, surgery, ophthalmology, dermatology, theriogenology, food animal medicine, food safety, and pathology. The goal is to prepare clinicians for certification by the various specialty boards and to provide the opportunity through residency programs for obtaining a graduate degree as well. Combined residency/graduate programs are encouraged for those who intend to pursue a career in academia.

The second major objective of the college is research on animal health and disease because of the vital importance of this endeavor to our society. The College of Veterinary Medicine is ideally suited for conducting biomedical research because of its concentrations of expertise represented by specialists in various aspects of veterinary medicine, and through its cooperative interactions with faculty and programs in the Institute of Food and Agricultural Sciences (IFAS) and the Health Sciences Center (HSC).

An active productive research program is vital to college graduate programs, to the optimal scholastic development of the faculty, and is essential to the continual advancement of knowledge for the professional veterinary medicine teaching program. Research programs in the academic departments are a requisite part of the program for graduate degrees and post doctoral training. This is an essential element in promoting and developing the scientific basis of veterinary medicine and is necessary for ensuring strong veterinary faculties and staffs of the future. Many biomedical research goals promise direct improvements in animal health care, while many at the same time hold tremendous potential for improving human health and well being.

I. PROGRAM

A. Professional Program

Since its inception in 1976 the professional degree program has grown and matured as facilities, equipment, and faculty have become available. It is now possible for the college to redefine it's curriculum into core or essential materials required of all students, and electives allowing for broader career choices and/or more in-depth experience in a selected area.

The critical mass of clinical faculty is now available to allow for excellent residency training programs in most of the recognized Board specialties.

B. Graduate Programs

College resources adequately support the Master's in Veterinary Medical Science in the clinical sciences area, and the Master's of Science and Doctor of Philosophy degrees in the Physiological Sciences and Infectious Diseases and Experimental Pathology programs. These resources include qualified faculty to teach the appropriate graduate courses, renovated and expanded research laboratories and animal housing facilities, research grant support to fund the research programs and provide adequate, though sometimes less than optimal, graduate student stipends. The college now has 49 graduate students and their goal is to gradually increase that number to 80. The limiting factor at

this time is the availability of additional funds for graduate student support.

The proposed Doctor of Philosophy degree program in Veterinary Medical Sciences has been operating under the Veterinary College's direction since 1991 (see Board of Regents minutes dated January 25, 1991 in Appendix A). Since that time 18 MS and 14 PhD degrees have been granted. The college has strong oversight of this program through the Associate Dean for Research and Graduate Studies, and the departmental graduate coordinators. There appears to be only minor overlapping with other on-going graduate programs in either IFAS or the HSC. The orientation of this program is towards food, fiber, equine, exotic, and companion animals. Graduate programs in the Animal Science Department emphasize growth, production, and management, while the College of Veterinary Medicine programs center around animal health and disease. The College and its graduates will benefit from having their own clearly defined Veterinary Medical Science Degree.

The College has maintained its close relationship with the Florida Veterinary Medical Association. Members of the Association sit on several college committees to provide insight and define the needs of the profession. Advisory boards from several of the livestock commodity groups provide input regarding research priorities and manpower needs. All of these groups have been most supportive of the college in its efforts to gain state funding for facilities, equipment, and personnel. Additionally,

many individuals and groups have contributed greatly to the private funding efforts of the college.

II. STUDENTS

The increasing number of well qualified applicants allows the College to be very selective in choosing its entering class each year. The majority of students accepted are Florida residents and the class size of 80 is appropriate for the needs of the state. Other than the College faculty, the admissions committee membership includes a private practitioner, the state veterinarian, and a member of the faculty of the Animal Science Department. The academic credentials of the accepted applicants are most impressive.

The national board examinations are administered in December and April of each year. Appendix B contains the examination results as recorded by the Department of Business and Professional Regulation, and as reported by the Professional Examination Service which administers the exam. It appears that the percentage of Florida graduates failing the examination was only slightly higher than the national average according to data supplied by the Professional Examination Service (14.5% vs. 12.7%). Nearly all graduates failing the examination the first time take it again and pass.

Additional graduate teaching assistantships would strengthen both the professional and the graduate programs. Stipend levels need to be raised one to two thousand dollars

annually to be competitive and allow attraction of the best DVM graduates into the advanced study programs.

The College now has in place a computerized system to keep track of its new graduates. This will be useful in obtaining data for outcomes assessment and for maintaining contact by the Alumni Association. The Association of American Veterinary Medical Colleges has instituted an annual survey of each graduating class to help establish the types of employment entered, salaries, and indebtedness (Appendix C). To date, the major shortcoming of this survey is in getting all or most of the new graduates to complete it each year.

The College student body has numerous organizations that promote professional and social interactions. Examples include the Student Chapter of the American Veterinary Medical Association (SCAVMA), and student chapters of the Bovine Practitioners Asscciation, Equine Practitioners Association, etc. The graduate students in the college have also organized to provide seminar opportunities and mixers with the faculty.

The office of the Associate Dean for Students and Instruction advises students on academic and professional issues and encourages and arranges counseling for personal problems. The professional student body for the past several years has been approximately two-thirds females and one-third males. Last year's entering class included 12 minority students (3 African-American, 8 Hispanic-American, and 1 Native American). The memorandum of agreement with Florida A & M University (FAMU)

should result in an increased number of black students entering the college. The college is to be commended for its efforts to engender a culturally diverse student body.

III. FACULTY

The continuing increase in the number of female veterinary students is now resulting in an ever increasing number of female faculty as they progress through residency and/or graduate programs. This is apparent in the increased number of female faculty members in the College. There are several minority faculty members in the College including two African-Americans. Aggressive recruiting efforts must be continued to attract and retain African-American faculty members.

The current college and departmental leadership is outstanding. Unfortunately, the head of the Physiological Sciences Department will be leaving soon to assume the deanship of the College of Veterinary Medicine at the University of Wisconsin. Combining the Departments of Infectious Diseases and Experimental Pathology into the Department of Pathobiology should greatly enhance faculty collaboration on research and graduate training programs. It also provides the opportunity and necessity of hiring another outstanding academic leader. Both the professional and graduate instructional programs seem to be well organized and presented as determined by examination of course syllabi, and from comments of both the professional and graduate students. Perusal of the curriculum vitae of some

faculty members showed strong publication records and successful competition for contract and grant funds.

The faculty member who occupies the Appleton Eminent Scholar Chair in Equine Medicine serves as liaison to the Florida Equine Industry for coordination of educational and research activities pertaining to equine sports medicine for the college. He is currently director of the Equine Research Unit and chairman of the Department of Large Animal Clinical Sciences. He is directing the development of a major project funded by the Division of Parimutuel Wagering, Department of Business and Professional Regulation, dealing with drug use and detection and the pharmacokinetics of those drugs in racing horses. This is currently a critical area of needed research for the Florida equine industry.

The eminent scholar's role fulfills the desires of the donor. Originally it was suggested that the chair should be occupied by an equine surgeon. When that arrangement did not work out, the donor was most supportive of the current focus of the chair.

The faculty member who occupies the Jerry and Lola Collins Eminent Scholar Chair in Greyhound Sports Medicine leads and coordinates the college's research program in Greyhound Sports Medicine. He acts as liaison between the college, the Florida Greyhound Track Operators Association and the American Greyhound Track Operators Association. These responsibilities include the development of sustainable research program support

in cooperation with development officers and deans of the college. Research projects involve the evaluation of limb injuries on U.S. greyhound tracks and a range of surgical and medical research projects. The eminent scholar also serves as Chairman of the Department of Small Animal Clinical Sciences and Director of the Center for Sports Medicine.

The donors are in full accord with the duties and the responsibilities of the individual occupying this chair.

Faculty cooperation within the college between departments in both the teaching and research programs is exceptional. This relationship extends across college lines to IFAS and the Medical School. Many faculty hold joint or adjunct appointments in other departments and colleges. Faculty are often guest lecturers in courses offered in other departments. Graduate students take courses from a variety of departments and colleges to enhance their course of study. Such a cooperative and productive environment is not common in all universities.

Limited funds are provided for faculty development and may be used for travel to scientific or professional meetings or in other appropriate ways. A variety of seminar programs have been organized in the college and around the campus to present opportunities for learning and using newer teaching methodologies.

Low faculty salaries are the most serious problem facing the college at this time. Appendix D shows the mean salaries by rank for the U.S. and Canadian colleges of veterinary medicine.

These data were compiled by the Association of American Veterinary Medical Colleges. The Florida College of Veterinary Medicine is represented by code number 7. Even when the high cost of living is taken into consideration for schools located in certain geographic regions, the Florida faculty salaries are not competitive. Low faculty salaries have contributed directly or indirectly to the loss of 41 out of 97 faculty members in the past six years (Appendix E).

IV. FACILITIES AND RESOURCES

When the veterinary academic building now under construction is occupied, faculty and graduate teaching assistants will have appropriate office space. Classrooms, laboratories, and conference rooms in this new facility will greatly relieve the current almost unbelievably crowded conditions. Moving some of the college's faculty members from the Health Science Center to the new Academic Building will allow movement of other college faculty members from the Progress Center and temporary housing in the animal research facilities and the entomology buildings into the Health Science Center.

Extensive renovations have been made to address the "sick building" syndrome in the veterinary sciences building. In addition, a state-of-the-art equine facility has been built, partially funded through private contributions.

The faculty and graduate students, with few exceptions, found the various university libraries and their holdings to be

adequate for most of their needs. Access through remote terminals is quite useful and saves traveling across campus.

The college is in the process of completing an electronic networking system, which will facilitate communication and data transmission among all college personnel. Rapidly advancing technology and escalating costs have challenged the college's budget for equipment. Grant funds, matching funds, and private money have all been combined in an effort to provide both instructional and research equipment. The tremendous cooperation that exists among academic units greatly enhances everyone's access to expensive equipment.

The operating budget is subsidized by leaving faculty positions vacant and utilizing the funds for operating expenses. This further compounds faculty morale problems by increasing the teaching and service load.

Support personnel are in short supply in many areas. The salary structure under the USPS is not competitive with the local market and particularly with Shands Hospital.

V. RESPONSE TO PREVIOUS PROGRAM RECOMMENDATIONS

The College has accomplished most of the actions recommended by the Board of Regents Program Review of 1986 and the American Veterinary Medical Association Council on Education recommendations of 1987.

The College administrative structure and organization has been streamlined.

Renovation of old facilities has provided much needed research laboratory space.

Planning, funding, and now construction of the Veterinary Academic Building will provide additional office, classroom, and laboratory space.

The "sick building" syndrome has been addressed and hopefully corrected. Isolation facilities for large animals are now available.

A state-of-the-art equine hospital now serves the growing horse industry in Florida.

The most serious instructional and research equipment needs have been met.

The graduate programs are growing in both quality and quantity.

VI. STRENGTHS, NEEDS, AND RECOMMENDATIONS

A. Strengths

The College administration (deans, department heads, and hospital service chiefs) are leading by example and have the support and respect of the faculty and students. The cooperation and interaction between the faculties of the College of Veterinary Medicine, IFAS, and the HSC strengthen the graduate and professional instructional programs, as well as the research efforts.

There is a strong liaison between the College and livestock, equine, and greyhound industries in the state. Additionally, the

College enjoys a strong and helpful relationship with the Florida Veterinary Medical Association.

Quality of the faculty and student body are both excellent. The curricula changes underway in the professional program will allow for a greater breadth of experiences for the students, as well as providing the opportunity for more in-depth study in a specific area(s) of choice.

B. Needs and Recommendations

The College should be complimented for and encouraged to continue to place its top priority on the professional degree program.

Space and facilities are still fragmented on and off the main campus. Completion of the Veterinary Academic Building will provide much needed classroom, laboratory, and office space. However, if the space currently occupied by the College of Veterinary Medicine in the HSC is lost, the College will be no better and perhaps worse off than it was previously. It would greatly strengthen the College's research programs and faculty and graduate student interactions if those in outlying facilities can be incorporated into either the HSC or the new building when completed.

The low faculty salary situation is critical. The loss of 41 out of 97 faculty in the past six years points out the magnitude of the problem. The faculty are leaving for better

paying positions in other institutions and entering the private practice of veterinary medicine.

Creative strategies must be developed to increase the faculty salaries. Funds from lapsed positions, operating budgets, grant monies, and private funds in whatever manner or combination should be considered.

For several years the College has had the responsibility for Master of Science and Doctor of Philosophy degree programs, providing the course work, research, training, and supervision of the graduate students. The quality of the program is assured and the number of graduates increasing. It is appropriate that the college now be given the privilege of granting their degrees in Veterinary Medical Science.

Because of the high cost and rapid development of new technology, there will remain the need for a strong equipment replacement budget for both the instructional and research programs.

The College faculty should be encouraged to take advantage of opportunities available on campus to gain experience in multimedia teaching technology and bring the newest teaching methodologies to the classroom.

APPENDICES

Appendix A: Board of Regents Minutes

by the "open meetings" law, and Mr. Ausley did not want to appear to be in violation of the law. Dr. Reed said that Regent Hantman would comment on Item 15, Approval of the Research Foundation at the University of Central Florida, Inc., as a Direct Support Organization. In addition, Dr. Reed said that Item 5, the Termination of a Bachelor's Degree Program at UCF, should reflect the correct name of the program, Broadcasting Technology.

Mrs. Ruffier moved that the Board adopt the Consent Agenda, as presented and amended; Mr. Keene seconded the motion; and members of the Board concurred. Items were amended, as noted.

1. APPROVAL OF MINUTES OF REGULAR MEETING HELD NOVEMBER 1, 1990; MINUTES OF EXECUTIVE COMMITTEE MEETING HELD NOVEMBER 16, 1990; AND MINUTES OF EXECUTIVE COMMITTEE MEETING HELD DECEMBER 14, 1990

The Board approved the Minutes of the regular meeting held on November 1, 1990, as written; the Minutes of the Executive Committee meeting held on November 16, 1990, as written; and the Minutes of the Executive Committee meeting held on December 14, 1990, as written.

2. APPROVAL OF PROPOSED REVISED RULES

A. Rule 6C-5.710, Recruitment, Selection and Appointment

Revisions to Rule 6C-5.710, Recruitment, Selection and Appointment, were withdrawn. Following further review, the proposed amendments will be resubmitted for Board review and approval.

B. Rule 6C-5.720, Classification Plan

Rule 6C-5.720, Classification Plan, is amended to reflect changes made to the class specifications and minimum qualifications during the project to restructure the classes employees in the University Support Personnel System. The amendments delete references to the "knowledge, skills, and abilities" statements and the established date from the class specifications. In addition, the use of the designation, "coordinator," was removed from the Classification Actions section since this designation was discontinued as a result of the restructure project.

The Board approved the proposed amendments to Rule 6C-5.720, Classification Plan, as presented. Rule 6C-5.720, as adopted, is included in these Minutes in the Appendix.

3. APPROVAL FOR THE UNIVERSITY OF FLORIDA COLLEGE OF VETERINARY MEDICINE TO BE RESPONSIBLE FOR EXISTING GRADUATE PROGRAMS IN VETERINARY MEDICINE

At present, graduate programs in veterinary medicine are offered at UF through the College of Medicine and through the

APPENDIX B

VETERINARY MEDICINE LICENSURE EXAM RESULTS
UNIVERSITY OF FLORIDA
1989-90 through 1993-94

	# taking exam	# passing exam	% passing	% change
89-90	90	65	72.22%	
90-91	92	70	76.09%	3.86%
91-92	94	78	82.98%	6.89%
92-93		missing*		
93-94	66	55	83.33%	0.35%

* The Department of Business and Professional Regulation changed the programming format during this fiscal year thereby making the data for 1992-93 unusable.

Source: Department of Business and Professional Regulation

Exceldocs: vetexams.uf, sla, Planning, October 10, 1994

Prepared by BOR Research, 10/10/94, SHEET1.XLS

Professional Examination Service
475 Riverside Drive
New York, New York, 10115

NBE: Veterinary Medical Licensing Examinination - National Board Examination (NBE)
UNIVERSITY OF FLORIDA, FLORIDA (NO. 8)
TESTED December 1993 and April 1994

These data are based on graduates or senior students attending AVMA accredited schools in the United States and Canada who took the examination for the first time during the above time period.

PASSING DATA

CRITERION REFERENCED PASSING SCORE	Scale Score Passing Point	Nationwide Number Passing	Nationwide Number Failing	Your School Number Passing	Your School Number Failing
	425	2009	291	65	11

Summary of Scale Scores and T-Scores

	Average Scale Score All Candidates	Average Scale Score Your Candidates	Standard Deviation All Candidates	Standard Deviation Your Candidates	T-Scores All Candidates	T-Scores Your Candidates
Total	503.46	504.49	69.55	70.85	50	50
Small Animal	532.77	552.21	82.42	85.90	50	52
Food Animal	453.10	426.26	97.86	97.65	50	47
Equine	475.63	485.36	97.12	91.71	50	51
Other	519.93	518.33	71.81	71.16	50	50

* Number of Candidates in Criterion Group (graduates of accredited school) is 2300
** Number of Candidates in Your School is 76

Professional Examination Service
475 Riverside Drive
New York, New York, 10115

NBE: Veterinary Medical Licensing Examinination - National Board Examination (NBE)
UNIVERSITY OF FLORIDA, FLORIDA (NO. 8)
TESTED December 1993 and April 1994

	Average Scale Score		Standard Deviation		T-Scores	
	All Candidates	Your Candidates	All Candidates	Your Candidates	All Candidates	Your Candidates
VETERINARY PRACTICE ROLES	503.46	504.49	69.55	70.85	50	50
Data Collection	488.22	489.08	80.60	74.83	50	50
Problem Identification	498.76	508.58	79.18	75.85	50	51
Problem Management	517.43	512.95	71.46	77.61	50	49
PRE-CLINICAL DISCIPLINES	486.82	495.32	77.97	76.61	50	51
Anatomy	479.91	493.14	107.69	100.44	50	51
Physiology	496.98	505.33	98.94	95.57	50	51
Disease Processes	470.80	472.13	103.57	103.63	50	51
Etiologic Agents, Immunology	486.56	508.66	96.61	94.62	50	52
Pharmacology	485.43	480.38	116.04	108.00	50	50
Toxicology	570.57	525.25	179.41	189.61	50	48
CLINICAL SCIENCE DISCIPLINES	517.01	511.28	69.60	73.62	50	49
Diagonstics	516.57	503.30	77.44	80.25	50	48
Therapeutics	556.00	547.96	87.37	98.89	50	49
Medicine	497.56	473.45	113.45	106.91	50	49
Surgery	485.39	519.66	114.00	116.92	50	53
Animal Production	434.47	460.59	156.58	163.78	50	51
OTHER DISCIPLINES	553.68	540.86	117.22	119.38	50	49
Public Health / Prevention	537.56	523.89	132.36	128.21	50	49
Ethics / Jurisprudence	592.35	572.72	234.22	248.56	50	49
ORGAN SYSTEMS:	503.46	504.49	69.55	70.85	50	50
Cardivascular	499.95	467.37	116.65	116.07	50	47
Endocrine	564.37	564.38	121.72	107.63	50	51
Gastroinstestinal	469.26	458.32	90.20	89.38	50	49
Henic & Lymphatic	482.15	435.63	125.03	127.18	50	46
Integumentary	532.92	584.89	92.19	85.99	50	55
Musculoskeletal	439.16	445.59	104.28	98.95	50	50
Nervous	510.85	505.87	111.78	105.44	50	50
Respiratory	506.77	490.24	96.84	105.35	50	48
Special Senses	532.29	565.11	136.90	144.09	50	52
Urinary	534.32	541.96	111.42	119.60	50	51
Reproduction	502.62	505.68	106.66	94.03	50	50
Multiple Organ Systems	529.34	537.18	82.47	90.04	50	51

Professional Examination Service
475 Riverside Drive
New York, New York, 10115

Clinical Competency Test

UNIVERSITY OF FLORIDA, FLORIDA (NO. 8)

TESTED December 1993 and April 1994

These data are based on graduates or senior students attending AVMA accredited schools in the United States and Canada who took the examination for the first time during the above time period.

SUBJECT HEADINGS	Average Scale Score		Standard Deviation		T-Scores	
	All Candidates	Your Candidates	All Candidates	Your Candidates	All Candidates	Your Candidates
Total	511.85	533.53	72.10	58.61	50	53
Small Animal	521.79	544.43	126.14	113.45	50	52
Food Animal	457.08	470.27	93.42	79.40	50	51
Equine	602.56	622.37	100.90	101.97	50	52
Other	543.17	613.76	161.23	142.21	50	54

Number of ALL CANDIDATES = 2337
Number of YOUR CANDIDATES = 75

PASSING CRITERIA

CRITERION REFERENCED PASSING SCORES	Scale Score Passing Point	All Candidates Number Passing	All Candidates Number Failing	Your School Number Passing	Your School Number Failing
	425	2063	274	71	4

Appendix C: Survey of Graduates

APPENDIX-C

AMERICAN VETERINARY MEDICAL ASSOCIATION
1931 N. MEACHAM ROAD, SUITE 100 • SCHAUMBURG, ILLINOIS 60173-4360
PHONE 708-925-8070 FAX 708-925-1329

RECEIVED
JAN 10 1994

January 4, 1993

Ms. Carolyn Frazier
Program Assistant
Student Services
College of Veterinary Medicine
University of Florida
Box J-125 Health Science Center
Gainesville, FL 32610-0125

Dear Ms. Frazier:

Enclosed are selected results on your graduates for the 1993 Survey of Veterinary Medical College Graduates.

National results are published in the Journal of the American Veterinary Medical Association:

December 15, 1993	Employment, starting salaries, and educational indebtedness of 1993 graduates of U.S. veterinary medical colleges
January 15, 1994	Employment of 1993 male and female graduates of U.S. veterinary medical colleges

On behalf of the AVMA, we sincerely appreciate the time and effort that you have given to this annual survey project. We feel the survey is valuable and hope that you will continue to participate and generate the best survey response for your graduates.

Sincerely,

J. Karl Wise, Ph.D.
Director
Center for Information Management

University of Florida
College of Veterinary Medicine

Table 1. Have you received any job offers?

	No.	Percent
Yes	27	84.4
No	5	15.6
Total	32	100.0

University of Florida
College of Veterinary Medicine

Table 2. How many employment offers?

	No.	Percent
One	9	34.6
Two	10	38.5
Three	5	19.2
Five or more	2	7.7
Total	26	100.0

University of Florida
College of Veterinary Medicine

Table 3. Have you accepted a new position?

	No.	Percent
Yes	24	75.0
No	8	25.0
Total	32	100.0

University of Florida
College of Veterinary Medicine

Table 4. Is your position full-time or part-time?

	No.	Percent
Full-Time	23	100.0
Total	23	100.0

AVMA Center for Information Management
1993 Survey of Graduates of US Veterinary Medical Colleges

University of Florida
College of Veterinary Medicine

Table 5. Total educational indebtedness upon graduation?

	No.	Percent
$0	4	13.3
$1 - $4,999	1	3.3
$5,000 - $9999	1	3.3
$30,000 - $34,999	8	26.7
$35,000 - $39,999	5	16.7
$40,000 - $44,999	3	10.0
$45,000 - $49,999	2	6.7
$50,000+	6	20.0
Total	30	100.0

AVMA Center for Information Management
1993 Survey of Graduates of US Veterinary Medical Colleges

University of Florida
College of Veterinary Medicine

Table 6. Planning postgraduate specialty training?

	No.	Percent
Yes	12	37.5
No	20	62.5
Total	32	100.0

University of Florida
College of Veterinary Medicine

Table 7. What type of employment accepted?

	Male		Female		Total	
	No.	Percent	No.	Percent	No.	Percent
Large Animal Pred	1	25	.	.	1	4
Mixed 50-50	.	.	1	5	1	4
Small Animal Pred	.	.	3	16	3	13
Small Animal Excl	.	.	10	53	10	43
Adv. Study-Training	3	75	4	21	7	30
Self Employed	.	.	1	5	1	4
Total	4	100	19	100	23	100

University of Florida
College of Veterinary Medicine

Table 8. What is your starting salary (on an annual basis)?

	$35,000 or greater	$31,000 to $34,999	$27,000 to $30,999	$23,000 to $26,999	$19,000 to $22,999	Less than $19,000	Total
Large Animal Pred	1	.	.	.	.	.	1
Mixed 50-50	.	1	.	.	.	.	1
Small Animal Pred	.	1	2	.	.	.	3
Small Animal Excl	.	.	7	3	.	.	10
Adv. Study-Training	.	.	.	.	4	3	7
Self Employed	1	.	.	.	.	.	1
Total	2	2	9	3	4	3	23

University of Florida
College of Veterinary Medicine

Table 9. Starting salary statistics

	Mean	Minimum	Maximum	No.
Large Animal Pred	$42,500	$42,500	$42,500	1
Mixed 50-50	$33,000	$33,000	$33,000	1
Small Animal Pred	$30,833	$28,500	$34,000	3
Small Animal Excl	$27,700	$26,000	$30,000	10
Adv. Study-Training	$16,411	$0	$20,000	7
Self Employed	$41,000	$41,000	$41,000	1
Total	$26,125	$0	$42,500	23

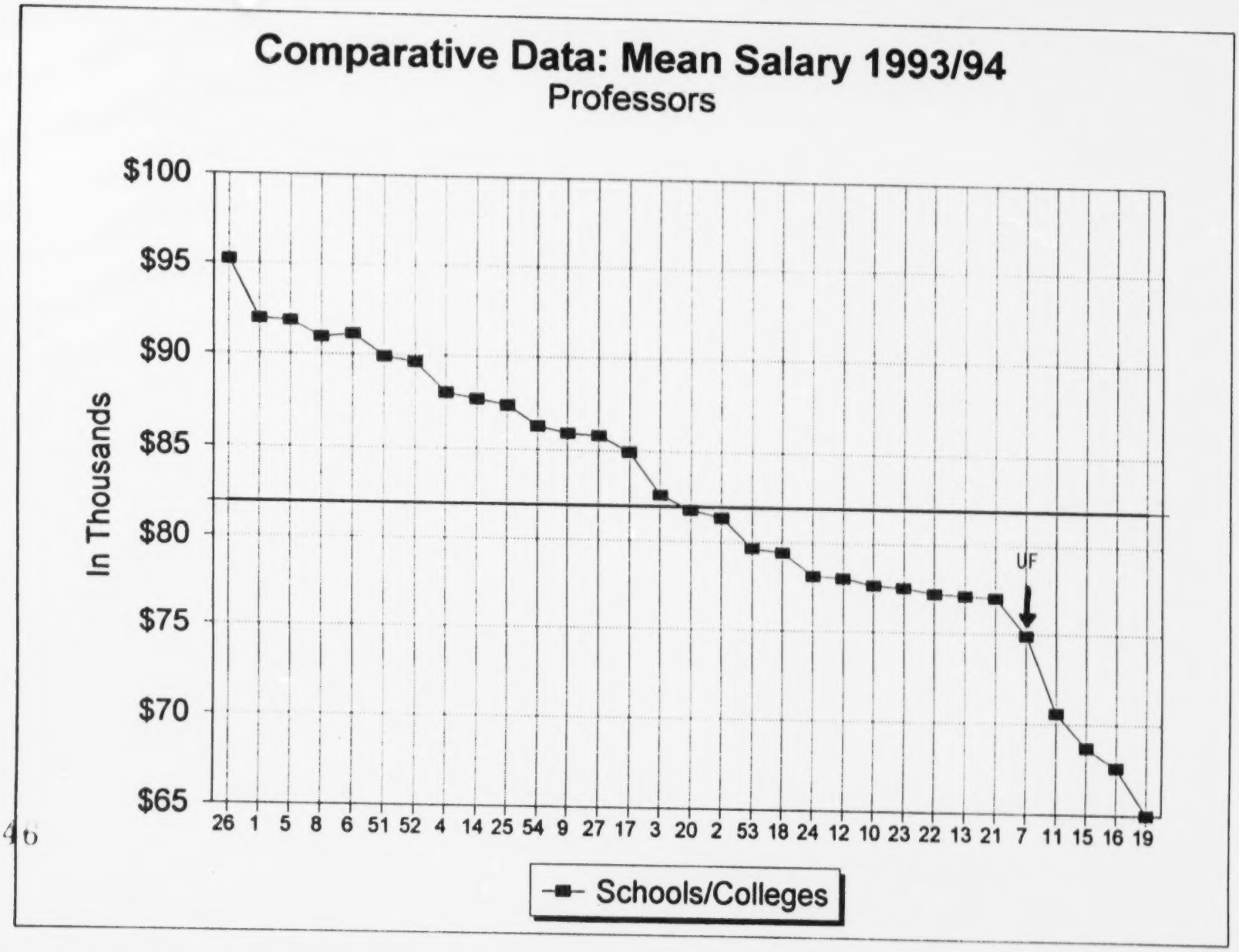
AVMA Center for Information Management
1993 Survey of Graduates of US Veterinary Medical Colleges

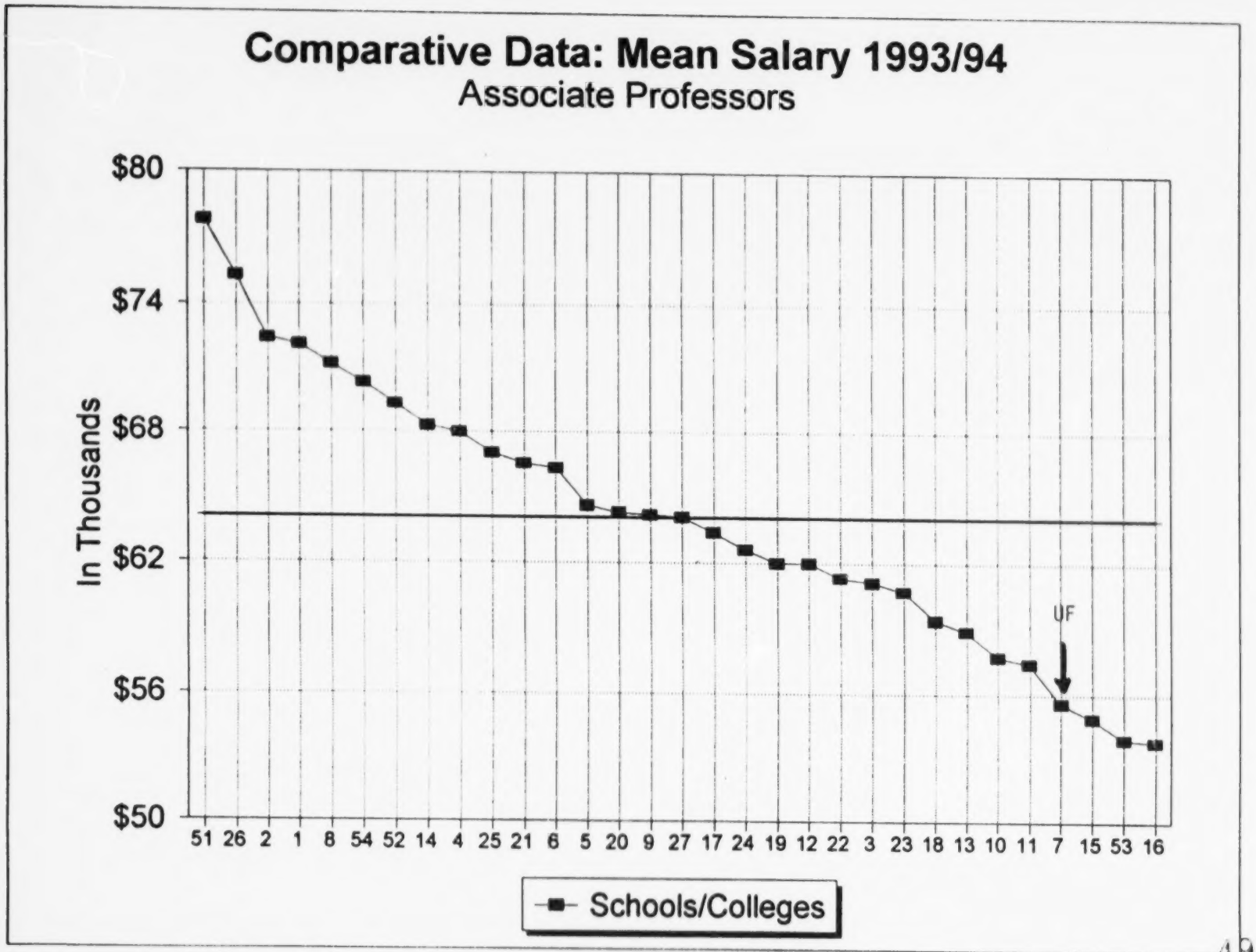
University of Florida
College of Veterinary Medicine

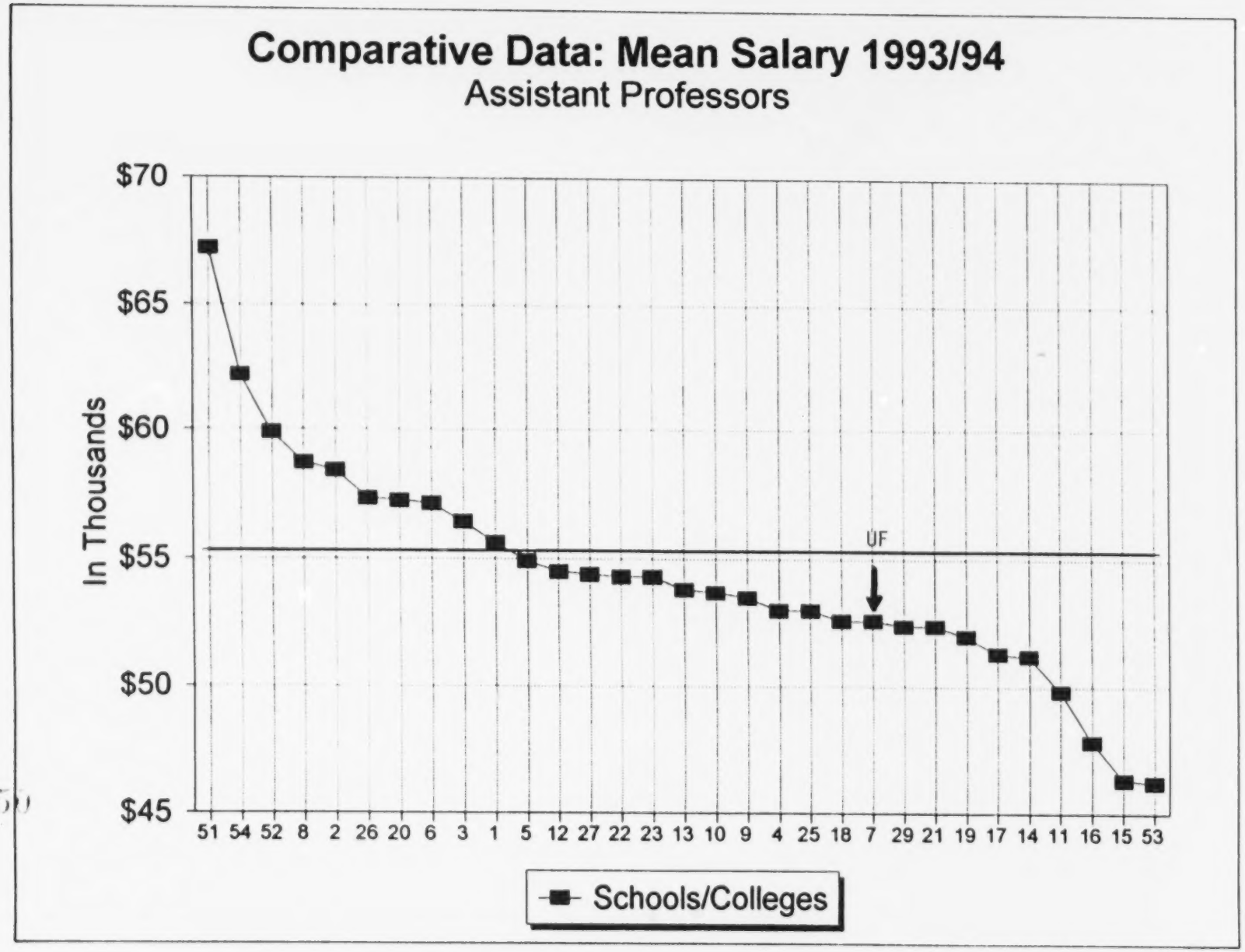
Table 10. In what state is your new employment?

	No.	Percent
Delaware	1	4.3
Florida	16	69.6
Massachusetts	1	4.3
New York	3	13.0
Oregon	1	4.3
Virginia	1	4.3
Total	23	100.0

Appendix D: Comparative Salary Data


Comparative Data: Mean Salary 1993/94
Professors
In Thousands
$100
$95
$90
$85
$80
$75
$70
$65
UF
26 1 5 8 6 51 52 4 14 25 54 9 27 17 3 20 2 53 18 24 12 10 23 22 13 21 7 11 15 16 19
Schools/Colleges


Comparative Data: Mean Salary 1993/94
Associate Professors
In Thousands
$80
$74
$68
$62
$56
$50
UF
51 26 2 1 8 54 52 14 4 25 21 6 5 20 9 27 17 24 19 12 22 3 23 18 13 10 11 7 15 53 16
Schools/Colleges


Comparative Data: Mean Salary 1993/94
Assistant Professors
In Thousands
$70
$65
$60
$55
$50
$45
UF
51 54 52 8 2 26 20 6 3 1 5 12 27 22 23 13 10 9 4 25 18 7 29 21 19 17 14 11 16 15 53
Schools/Colleges

Appendix E: Faculty Attrition

UNIVERSITY OF FLORIDA

College of Veterinary Medicine
Office of the Dean
Richard E. Dierks, Dean
Ronald R. Gronwall, Executive Associate Dean

[redacted]-0125
Telephone: 904/392-4700
Fax: 904/392-8351

May 31, 1994

MEMORANDUM

TO: Dr. Robert Garrigues
Associate V.P. for Finance and Operations, HSC

FROM: R. E. Dierks, Dean Dick

SUBJ: Faculty losses

Information concerning the salary position of our faculty among our selected peer institutions and among all veterinary colleges in North America is attached for your information and review. This is the same comparative data sent earlier.

The average salary for our professors and associate professors places them in the bottom quartile among all veterinary colleges. Since most assistant professors are relatively new hires, their salaries are less compressed and they rank in the third quartile for average salary among all veterinary colleges.

When I joined the faculty in 1989, the college had 114 faculty lines. 8.5 faculty lines were rescinded by the State with the recession. With the accompanying loss of revenues, we have had to sequester an additional 8.0 lines to provide enough operating funds for the departments to teach their courses and remain operational. We are operating with a base of 97 permanent faculty lines currently filled or with searches in progress.

Since 1988, the college has lost 41 faculty to other universities or private practice, largely due to non-competitive salaries. During that same period, two assistant professors were denied tenure, four professors retired and one associate professor died. 30 visiting instructors, visiting assistant professors or visiting associate professors were hired temporarily during that same time frame to conduct required teaching and clinical duties. Each of those individuals has also left as positions were refilled on a more permanent basis.

The following table lists the tenured and tenured track faculty losses incurred from 1988 to the present:

Year	Resigned; accepted another position	Did not gain tenure	Retired
1988	6 Assist. Prof. 3 Assoc. Prof. 1 Prof.		
1989	3 Assist. Prof. 2 Assoc. Prof.		
1990	2 Assist. Prof. 2 Assoc. Prof.		2 Prof.
1991	2 Assist. Prof. 3 Assoc. Prof. 2 Prof.		1 Assoc. Prof. (died)
1992	2 Assist. Prof. 4 Assoc. Prof. 2 Prof.	1 Assist. Prof.	
1993	4 Assist. Prof. 1 Prof.	1 Assist. Prof.	2 Prof.
1994	1 Assist. Prof. 1 Assoc.		
TOTAL	41 faculty resigned	2 didn't get tenure	4 retired - 1 died

The college currently has the funding to fill 97 faculty lines. I consider the loss of 41 faculty to "better positions" at other institutions or, in several instances, private practice, over 6 ½ years to be excessive. With faculty losses of that magnitude it has not been possible to build stability and sustainable excellence into many of the college's programs.

I find it difficult to explain how the Florida legislature is willing to provide millions of dollars for new facilities for the college, but are unwilling to improve the salary structure enough to stabilize our faculty numbers and reduce the excessive turnover. Unless we can retain a high percentage of faculty for much of their academic career, it will be difficult for the college to achieve and maintain very many programs of national stature. In 1994, to date, we have lost one assistant professor to the University of California-Davis and one associate professor to Cornell University. Currently, two associate professors and four professors are seriously considering "better-paying positions" at other institutions.

The college has corrected its facility issues in time for the AVMA accreditation site visit in October, 1994 but I can tell you with certainty that several members of the AVMA Council on Education view the faculty turnover (losses) the college has had and is continuing to experience as excessive. I believe our faculty losses on a percentage basis are among the highest of any college at the University of Florida.

RED/ss

Attachments

cc: R. Gronwall
D. Challoner
J. Davidson

Appendix F: Consultant's Vita

Name:	David Prewitt Anderson
Title:	Dean, College of Veterinary Medicine Professor of Avian Medicine and Medical Microbiology
Home Address:	190 Harris Street, Winterville, Georgia 30683
Born:	September 14, 1934, Twin Falls, Idaho

Raised on an irrigated crop and livestock farm in Twin Falls, Idaho. Graduate from Twin Falls High School in 1952.

EDUCATIONAL BACKGROUND:

1952-54 - University of Idaho, pre-veterinary curriculum

1955-58*- Military Service

1959	- Washington State University	B.S.
1961	- Washington State University	D.V.M.
1964	- University of Wisconsin	M.S.
1965	- University of Wisconsin	Ph.D.

* United States Army, AMEDS - Meat and Dairy Hygiene School, Chicago, Illinois, Instructor.

Doctorate: Doctor of Philosophy - Veterinary Science

Dissertation Title: Environmental Influences on Avian Respiratory Diseases

Minor: Medical Microbiology

EXPERIENCE:

Dean, College of Veterinary Medicine. The University of Georgia, February 1975 to present. Responsible for the teaching, research, and service program involving 125 faculty members, 320 professional students, 85 graduate students, and 300 staff members. The College includes eight academic departments, the teaching hospital, two animal disease diagnostic laboratories (Athens and Tifton), Veterinary Medical Experiment Station, Poultry Diagnostic and Research Center, Southeastern Cooperative Wildlife Disease Study, and an animal technician training program in conjunction with Fort Valley State College, Fort Valley, Georgia. Annual operating budget of the College for 1993-94--approximately $25,000.000.

Professor of Avian Medicine and Medical Microbiology, College of Veterinary Medicine, The University of Georgia, November 1973 to February 1975.

Associate Dean for Research and Graduate Affairs, Associate Director of the Institute of Comparative Medicine, College of Veterinary Medicine, The University of Georgia, 1971 to 1973.

Professor of Avian Medicine and Medical Microbiology and Head of the Department of Avian Medicine and Director of the Poultry Disease Research Center, 1970-71.

Professor of Medical Microbiology and Director of the Poultry Disease Research Center, The University of Georgia, 1969-70.

Assistant Professor , Veterinary Science Department and Assistant Director of the Biotron, University of Wisconsin, 1965-69.

Research Associate, Veterinary Science Department, University of Wisconsin, 1964-65.

NIH Trainee, Veterinary Science Department, University of Wisconsin, 1961-64.

U.S. Army--USAMEDS--Meat and Dairy Hygiene School, Chicago, Illinois, 1955-58.

PROFESSIONAL ACTIVITIES:

Board of Directors, Association of Gnotobiotics, 1970-74.
Chairman, Leukosis Committee, American Association of Avian Pathologists, 1971-72.
President 1988-89, President-elect 1987-88, Chairman, Nominating Committee 1973-74, American Association of Avian Pathologists.
Chairman 1972-73, Vice Chairman 1971-21, Board of Governors, American College of Veterinary Microbiologists.
Chairman, Examinations Committee, American College of Veterinary Microbiologists, 1971-73.
Editorial Board, American Journal of Veterinary Research, 1973-78.
Editor of journal of Avian Diseases, 1974-present.
AVMA Committee on Scientific Programs, Section on Research, 1974-78.
Consultant, Campbell Soup Company (Member, Nutrition and Research Advisory Council), 1973-1980.
Chairman, Scientific Program Committee, VIth International Congress of the World Veterinary Poultry Association, July 1977.
Member, Committee on Animal Health, Board on Agriculture and Renewable Resources, National Academy of Sciences, 1977-80 (also Subcommittee on Antibiotics in Animal Feeds-1979).
Member, Animal Health Science Research Advisory Board, Science and Education Administration, United States Department of Agriculture, 1978-1986.
Representative from the AAVMC Council of Deans on the NASULGC Legislative Committee, 1976-78.
Board of Directors, Southern Veterinary Medical Federation, 1979-1986 Chairman, 1984 and 1985.
Chairman, Council of Deans, Association of American Veterinary Medical Colleges, 1981. Chairman-elect 1980.
Member, Task Force--Animal Agriculture: Research to Meet Human Needs in the 21st Century, 1980.

Member, Executive Committee, Association of American Veterinary Medical Colleges, 1981.
Member, USDA Study Team to Determine Feasibility of Federal Funding for the Old West Regional College of Veterinary Medicine, 1981.
Member, Commission on Veterinary Medicine of the National Association of State Universities and Land Grant Colleges, 1980-83. Vice Chairman in 1983.
CSRS Review Team Member. Site Visit at Tuskegee Institute, December 1982.
Policy Advisory Committee for the Science and Education Research Grants Program, USDA, 1982-83.
Consultant: Kuwait Institute for Scientific Research (KISR). Developed proposal for construction, equipping, staffing of a veterinary diagnostic laboratory, 1983.
Consultant: ImuTech, Inc. Scientific Advisory Council, 1983-1986.
Veterinary Medicine Advisory Committee, Food and Drug Administration 1984-88.
Consultant: State University System of Florida--Program Review of Veterinary Medicine, 1986.
Distinguished Practitioner, National Academies of Practice, 1986-present.
United Way, University Chairman, 1987-88.
Member, National Advisory Committee on Meat and Poultry Inspection, USDA, FSIS, 1990-1993.
Member, Technical Analysis Group--Slaughter, USDA, FSIS, 1993-present.

CIVIC ACTIVITIES:

Board of Directors, Cedar Creek Swimming Pool Association, 1970-72
Administration Board, Tuckston United Methodist Church, 1971-80
Co-sponsor (with Mrs. Anderson) of Girl Scout troop, 1976-79
Sponsor of Explorer Scout Troop in Veterinary Medicine
Rotary International
United Way Campaign
Athens Rifle Club
Faculty Advisor, Beta Theta Pi
Athens Area Chamber of Commerce

COLLEGE AND UNIVERSITY COMMITTEES:

University Council, 1974-present
Continuing Education Committee, 1969-70
Research Project Review Committee, 1970-71
Manuscript Review Committee, 1972-73
Graduate Affairs Committee, 1972-73
University Health Council, 1976-1980
Academic Affairs Advisory Council, 1975-present
University Patent Committee, 1974-83
Chairman, Search Committee for Head of Medicine and Surgery Department, 1971
Animal Technician Program Committee, 1974-75
Chairman, Search Committee, Dean School of Forest Resources, 1980

Annual Fund Coordinating Council, 1979
President's Club, 1980-present
Advisory Council, Bicentennial Fund, 1981-84
Search Committee for Vice President for Research, 1985.
Chairman, Search Committee for Director Cooperative Extension Service, 1988
Chairman, Search Committee for Dean, College of Pharmacy, 1990

PROFESSIONAL SOCIETY MEMBERSHIPS:

North Georgia Veterinary Medical Association
Georgia Veterinary Medical Association
American Veterinary Medical Association
American Association of Avian Pathologists
Diplomate, American College of Veterinary Microbiologists
Diplomate, American College of Poultry Veterinarians
Conference of Research Workers in Animal Diseases
Poultry Science Association
World Veterinary Poultry Association
Worlds Association of Veterinary Microbiologists
Association of American Veterinary Medical Colleges

HONOR SOCIETY MEMBERSHIPS:

Phi Eta Sigma
Alpha Zeta
Phi Kappa Phi
Phi Zeta
Sigma Xi
Gamma Sigma Delta
AGHON
Blue Key
Gridiron

RECOGNITION AND AWARDS:

Borden Award - Senior veterinary student
Honorary Membership - AMEVEA (Asociacion Nacional de Medicos Veterinarias y Zootechnistas Especialistas en Avicultura)
American Men and Women of Science
Who's Who in Georgia
Who's Who in America
Georgia Veterinarian of the Year, 1980
A. M. Mills Award for Distinguished Service in Veterinary Medicine, 1988

ORIGINAL RESEARCH REPORTS:

Anderson, D. P., F. L. Cherms, and R. P. Hanson. Studies on Measuring the Environment of Turkeys Raised in Confinement. Poultry Science 43: 305-318, 1964.

Anderson, D. P. , C. W. Beard, and R. P. Hanson. The Adverse Effects of Ammonia on Chickens Including Resistance to Infection with Newcastle Disease Virus. Avian Dis.. 8: 369-379, 1964.

Anderson, D. P., and R. P. Hanson. The Influence of the Environment on Viral Diseases of Poultry. Avian Dis. 9: 171-182, 1965.

Anderson, D. P., C. W. Beard, and R. P. Hanson. The Influence of Inhalation of Carbon Dioxide on Chickens Including Resistance to Infection with Newcastle Disease Virus. Avian Dis. 10: 216-224, 1966.

Anderson, D. P., C. W. Beard, and R. P. Hanson. The Influence of Poultry House Dust, Ammonia, and Carbon Dioxide on the Resistance of Chickens to Newcastle Disease Virus. Avian Dis. 10: 177-188, 1966.

Beard, C. W., and D. P. Anderson. Aerosol Studies with Avian Mycoplasma. 1. Survival in the Air. Avian Dis. 11: 54-59, 1967.

Anderson, D. P., and C. W. Beard. Aerosol Studies with Avian Mycoplasma. 2. Infectivity of Mycoplasma gallisepticum for Chickens and Turkeys. Avian Dis. 11: 60-64, 1967.

Wolfe, R. R., D. P. Anderson, F. L. Cherms, and W. E. Roper. Effect of Dust and Ammonia Air Contamination on Turkey Response. Transactions of ASAE 11: 515-522, 1968.

Anderson, D. P., R. R. Wolfe, and F. L. Cherms. Influence of Dust and Ammonia on the Development of Air Sac Lesions in Turkeys. A.J.V.R. 29: 1049-1058, 1968.

Frey, M. L., R. P. Hanson, and D. P. Anderson. A Medium for the Isolation of Avian Mycoplasmas. A.J.V.R. 29: 2163-2171, 1968.

Fujisaki, Y. H., H. Kawamura, and D. P. Anderson. Reoviruses Isolated from Turkeys. A.J.V.R. 30: 1035-1043, 1969.

Frey, M. L., D. P. Anderson, and R. P. Hanson. Airsacculitis Relation to Mycoplasmas in Turkeys Free of Mycoplasma gallisepticum. Avian Dis. 12: 693-699, 1968.

Kawamura, H., D. J. King, Jr., and D. P. Anderson. A Herpesvirus Isolated from Kidney Cell Culture of Normal Turkeys. Avian Dis. 13: 853-863, 1969.

Homme, P. J., B. C. Easterday, and D. P. Anderson. Avian Virus Infection. II. Experimental Epizootiology of Influenza A/Turkey/Wisconsin/66 Virus in Turkeys. Avian Dis. 14: 240-247, 1970.

Aycardi, E. R., D. P. Anderson, and R. P. Hanson. Classification of Avian Mycoplasmas by Gel-Diffusion and Growth Inhibition Tests. Avian Dis. 15: 434-447, 1971.

Eidson, C. S., D. P. Anderson, S. H. Kleven, and J. Brown. Field Trials of Vaccines for Marek's Disease. Avian Dis. 15: 312-322, 1971.

Eidson, C. S., and D. P. Anderson. Immunization against Marek's Disease. Avian Dis. 15: 68-81, 1971.

Kleven, S. H., C. S. Eidson, and D. P. Anderson. Techniques for Detection of Infection of Chickens with the Herpesvirus of Marek's Disease. Proc. 74th Annual Meeting of the United States Animal Health Association, pp. 644-650, 1970.

Eidson, C. S., O. J. Fletcher, S. H. Kleven, and D. P. Anderson. Detection of Marek's Disease Antigen in Feather Follicle Epithelium of Chickens Vaccinated against Marek's Disease. J. Nat. Cancer Inst. 47: 113-120, 1971.

Anderson, D. P., C. S. Eidson, and D. J. Richey. Age Susceptibility of Chickens to Marek's Disease. Am. J. Vet. Res. 32: 935-938, 1971.

Eidson, C. S., O. J. Fletcher, and D. P. Anderson. Characterization of Ala-1 Isolate of Acute Marek's Disease. Poultry Sci. 50: 693-699, 1971.

Eidson, C. S. and D. P. Anderson. Optimum Age for Vaccinating Chickens against Marek's Disease. Poultry Sci. 50: 1837-1841, 1971.

Kleven, S. H., C. S. Eidson, and D. P. Anderson. Immunosuppressive Effects of Infection for Chickens with Marek's Disease Herpesviruses. Oncogenesis and Herpesviruses. IARC, Lyon, 45-47, 1972.

Anderson, D. P., D. D. King, C. S. Eidson, and S. H. Kleven. Filtered Air Positive Pressure (FAPP) Brooding of Broiler Chickens. Avian Dis. 16: 20-26, 1972.

Eidson, C. S., S. H. Kleven, and D. P. Anderson. Vaccination against Marek's Disease. Oncogenesis and Herpesviruses. IARC, Lyon, 147-152, 1972.

King, D. D., R. W. Loan, and D. P. Anderson. The Effect of Anti-lymphocytic Globulin on the Clinical Manifestations of Marek's Disease. Oncogenesis and Herpesviruses. IARC, Lyon, 41-44, 1972.

Eidson, D. S., D. P. Anderson, and D. D. King. Resistance of Progeny from Parent Stock Immunized against Marek's Disease. A. J. Vet. Res. 32: 2071-2076, 1971.

Kleven, S. H., and D. P. Anderson. In vitro Activity of Various Antibiotics against Mycoplasma synoviae. Avian Dis. 15: 551-557, 1971.

Kleven, S. H., C. S. Eidson, D. P. Anderson, and O. J. Fletcher. Depression of the Antibody Response to Mycoplasma synoviae in Chickens Infected with Marek's Disease Herpesviruses. Am. J. Vet. Res. 33: 2037-2042, 1972.

Kleven, S. H., D. D. King, and D. P. Anderson. Airsacculitis in Broilers Caused by Mycoplasma synoviae: Effect of Vaccination with Infectious Bronchitis Virus on Production of Air Sac Lesions. Avian Dis. 16: 915-924, 1972.

Eidson, C. S., D. D. King, H. E. Connell, D. P. Anderson, and S. H. Kleven. Efficacy of Turkey Herpesvirus Vaccine against Marek's Disease in Broilers. Poultry Sci. 52: 1482-1491, 1973.

Eidson, C. S., S. H. Kleven, and D. P. Anderson. Effect of Antibiotics on Turkey Herpesvirus Vaccine. Poultry Sci. 52: 755-760, 1973.

Eidson, C. S., S. H. Kleven, and D. P. Anderson. Efficacy of Cell-free and Cell-associated Herpesvirus of Turkeys Vaccine in Progeny from Vaccinated Parental Flocks. Am. J. Vet. Res. 34: 869-872, 1973.

King, D. D., S. H. Kleven, D. M. Wenger, and D. P. Anderson. Field Studies with Mycoplasma synoviae. Avian Dis. 17: 722-726, 1973.

Donahoe, J. P., D. P. Anderson, S. H. Kleven, C. S. Eidson, and L. N. Drury. Filtered Air-Positive Pressure Rearing of Broiler Chickens. Poultry Sci. No. 4, 53: 1498-1506, 1974.

Eidson, C. S., S. H. Kleven, and D. P. Anderson. Vaccination against Marek's Disease with the Turkey Herpesvirus Vaccine. Poultry Sci. 53: 2193-2200, 1974.

Villegas, A. C., S. H. Kleven, and D. P. Anderson. Evaluation of Avian Mycoplasma Membranes as Antigens. Avian Dis. 20: 342-354, 1976.

Villegas, P., S. H. Kleven, and D. P. Anderson. Effect of Route of Newcastle Disease Vaccination on the Incidence of Airsacculitis in Chickens Infected with Mycoplasma synoviae. Avian Dis. 20: 395-400, 1976.

Fletcher, O. J., D. P. Anderson, and S. H. Kleven. Histology of Air Sac Lesions Induced in Chickens by Contact Exposure to Mycoplasma synoviae. Vet. Pathol. 13: 303-314, 1976.

Villegas, P., D. P. Anderson, S. H. Kleven, and S. A. Vezey. Aerosol Vaccination against Newcastle Disease III. Field Experiments in Broiler Chickens. Avian Dis. 21: 16-25, 1977.

Anderson, D. P. and J. D. Clark. Laboratory Animal Medicine in a College of Veterinary Medicine. J.A.V.M.A. 171: 879-881, 1977.

Anderson, D. P. Expected Needs for New Animal Health Products in the 1980's and Beyond. J. Vet. Med. Educ. 9(2): 54-55, 1983.

NOTE: King, D. D., King, D. J., Frey, M. L., Homme, P. J., Aycardi, E. R., Donahoe, J. P. Villegas, A. C., and Villegas, P. were graduate students of Dr. Anderson.

During the period 1969-75 while actively engaged in research, 35 presentations were made to a variety of state, regional, national, and international symposia, conferences, congresses, and association meetings. A listing is available if desired.

Since 1975 over 300 presentations have been made in the form of "welcomes", "introductory remarks", and "reports from the college" to the Board of Regents, legislative committees, alumni dinners, professional societies, and commodity groups.